## AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Page 3, please replace the last paragraph beginning with the phrase "According to the present invention described in claim 1 . . ." with the following amended paragraph:

---According to ~~the present invention described in claim 1~~ a non-limiting feature of the invention, provided is an apparatus for calculation of a correlation value corresponding to a frequency error, includes: a 0-th degree correlation unit for taking, to output, a correlation between a reference signal and a measurement signal; an n-th degree correlation unit including a frequency addition calculator for calculating a frequency component addition signal having a frequency component added to the reference signal, and a correlation calculator for taking, to output, a correlation between the frequency component addition signal and the measurement signal; and an addition unit for adding an output of the 0-th degree correlation unit and an output of the n-th degree correlation unit.---

Page 4, please replace the second full paragraph beginning with the phrase "The present invention described in claim 2 . . ." with the following amended paragraph:

---~~The present invention described in claim 2,is~~ A non-limiting feature of the present invention includes an apparatus for calculation of a correlation value corresponding to a frequency error ~~according to claim 1~~, wherein the frequency addition calculator multiplies the reference signal by $e^{jwt}$, where $\omega=2\pi f$ (f is a frequency). ---

Page 4, please replace the third full paragraph beginning with the phrase "The present invention described in claim 3 . . ." with the following amended paragraph:

~~---The present invention described in claim 3, is~~ A non-limiting feature of the present invention includes an apparatus for calculation of a correlation value corresponding to a frequency error ~~according to claim 1~~, wherein the frequency addition calculator takes an EXOR between a digital clock of a constant frequency and the reference signal.

Page 4, please replace the fifth full paragraph beginning with the phrase "The present invention described in claim 4 . . ." with the following amended paragraph:

~~---The present invention described in claim 4,is~~ A non-limiting feature of the present invention includes an apparatus for calculation of a correlation value corresponding to a frequency error ~~according to claim 1~~, wherein the reference signal is a data symbol having a spread code superposed thereon, and the frequency addition calculator takes an EXOR between the data symbol and a digital clock of a constant frequency, to superpose the spread code.---

Page 4, please replace the sixth full paragraph beginning with the phrase "The present invention described in claim 5 . . ." with the following amended paragraph:

~~---The present invention described in claim 5, is~~ A non-limiting feature of the present invention includes a method for calculation of a correlation value corresponding to a frequency error,

including: a 0-th degree correlation step for taking, to output, a correlation between a reference signal and a measurement signal; an n-th degree correlation step including a frequency addition calculator for calculating a frequency component addition signal having a frequency component added to the reference signal, and a correlation calculator for taking, to output, a correlation between the frequency component addition signal and the measurement signal; and an addition step for adding an output of the 0-th degree correlation step and an output of the n-th degree correlation step.---

Page 5, please replace the first full paragraph beginning with the phrase "The present invention described in claim 6 . . ." with the following amended paragraph:

----~~The present invention described in claim 6, is~~ A non-limiting feature of the present invention includes a computer-readable medium embodying a program of instructions for execution by the computer to perform a method for calculation of a correlation value corresponding to a frequency error, including: a 0-th degree correlation step for taking, to output, a correlation between a reference signal and a measurement signal; an n-th degree correlation step including a frequency addition calculator for calculating a frequency component addition signal having a frequency component added to the reference signal, and a correlation calculator for taking, to output, a correlation between the frequency component addition signal and the measurement signal; and an addition step for adding an output of the 0-th degree correlation step and an output of the n-th degree correlation step.---

Page 5, please replace the second full paragraph beginning with the phrase "The present invention described in claim 7 . . ." with the following amended paragraph:

~~---The present invention described in claim 7, is~~ A non-limiting feature of the present invention includes a correlation system including: a frequency adding unit for receiving a reference signal R0(t) and adding thereto a predetermined plurality n of frequency components (F1-Fn) to output a resultant reference signal R1(t)-Rn(t); an adder for receiving n reference signals R1(t)-Rn(t) and a single said reference signal R0(t) as a base and adding them together to output a corrected reference signal R(t); and a correlator for taking a correlation between a measurement signal S(t) and said corrected reference signal R(t) to output a correlation output signal.---

Page 5, please replace the last paragraph beginning with the phrase "The present invention described in claim 8 . . ." with the following amended paragraph:

~~---The present invention described in claim 8, is~~ A non-limiting feature of the present invention includes a correlation system ~~according to claim 7~~, wherein the frequency adding unit multiplies the reference signal R0(t) by [[$e^{-jwt}$]] $e^{-j\omega t}$, where $\omega = 2\pi f$ (f is a frequency).---

Page 6, please replace the first full paragraph beginning with the phrase "The present invention described in claim 9 . . ." with the following amended paragraph:

~~---The present invention described in claim 9, is~~ A non-limiting feature of the present invention includes a correlation system ~~according to claim 7~~, wherein the frequency adding unit outputs an exclusive logical sum (EXOR) between digital clocks of frequencies corresponding to the frequency components (F1-Fn) and the reference signal R0(t).---

Page 6, please replace the second full paragraph beginning with the phrase "The present invention described in claim 10 . . ." with the following amended paragraph:

---~~The present invention described in claim 10, is~~ A non-limiting feature of the present invention includes a correlation system including a frequency adding unit having a predetermined plurality n of multiplying unit (EXOR), an adder, a spreader, and a correlator, wherein the plurality n of multiplying unit (EXOR) each receive a corresponding frequency component (F1-Fn) and a symbol data DO(t) as a base and multiply both of them to output a multiplied symbol data D1(t)-Dn(t), the adder receives said symbol data D1(t)-Dn(t) from a respective multiplying unit (EXOR) and said symbol data D0(t) as the base and performs an adding process for them to output a resultant addition symbol data D(t), the spreader receives a spread signal of said addition symbol data D(t) and superposes thereon a spread code L(t) to output a corrected reference signal R(t), and the correlator receives said corrected reference signal R(t) and a measurement signal S(t) and takes a correlation between them to output a correlation output signal.---

Page 6, please replace the third full paragraph beginning with the phrase "The present invention described in claim 11 . . ." with the following amended paragraph:

---~~The present invention described in claim 11, is~~ A non-limiting feature of the present invention includes a correlation system ~~according to claim 7~~, wherein the measurement signal S(t) is a reception signal of a spread signal spectrum spread.---

Page 6, please replace the fourth full paragraph beginning with the phrase "The present

invention described in claim 12 . . ." with the following amended paragraph:

~~---The present invention described in claim 12, is~~ A non-limiting feature of the present invention includes a correlation system ~~according to claim 10~~, wherein the measurement signal S(t) is a reception signal of a spread signal spectrum spread.---

Page 6, please replace the fifth full paragraph beginning with the phrase "The present invention described in claim 13 . . ." with the following amended paragraph:

~~---The present invention described in claim 13, is~~ A non-limiting feature of the present invention includes a correlation system ~~according to claim 7~~, wherein the measurement signal S(t) is a spectrum spread signal of a W-CDMA system.---

Page 7, please replace the first paragraph beginning with the phrase "The present invention described in claim 14 . . ." with the following amended paragraph:

~~---The present invention described in claim 14, is~~ A non-limiting feature of the present invention includes a correlation system ~~according to claim 10~~, wherein the measurement signal S(t) is a spectrum spread signal of a W-CDMA system.---

Page 7, please replace the second paragraph beginning with the phrase "The present invention described in claim 15 . . ." with the following amended paragraph:

~~---The present invention described in claim 15, is~~ A non-limiting feature of the present invention includes a correlation method including: a frequency adding step for receiving a reference signal R0(t) and adding thereto a predetermined plurality n of frequency components (F1-Fn) to output a resultant reference signal R1(t)-Rn(t); an adding step for receiving n reference signals R1(t)-Rn(t) and a single said reference signal R0(t) as a base and adding them together to output a corrected reference signal R(t); and a correlating step for taking a correlation between a measurement signal S(t) and said corrected reference signal R(t) to output a correlation output signal.---

Page 7, please replace the third paragraph beginning with the phrase "The present invention described in claim 16 . . ." with the following amended paragraph:

~~---The present invention described in claim 16, is~~ A non-limiting feature of the present invention includes a correlation method including a frequency adding step having a predetermined plurality n of multiplying step (EXOR), an adding step, a spreading step, and a correlating step, wherein the plurality n of multiplying step (EXOR) each receive a corresponding frequency component (F1-Fn) and a symbol data D0(t) as a base and multiply both of them to output a multiplied symbol data D1(t)-Dn(t), the adding step receives said symbol data D1(t)-Dn(t) from a respective multiplying step (EXOR) and said symbol data D0(t) as the base and performs an adding process for them to output a resultant addition symbol data D(t), the spreading step receives a spread signal of said addition symbol data D(t) and superposes thereon a spread code L(t) to output a corrected reference signal R(t), and the correlating step receives said corrected reference signal R(t) and a measurement signal S(t) and takes a correlation between them to output a correlation output signal.---

Page 7, please replace the fourth paragraph beginning with the phrase "The present invention described in claim 17 . . ." with the following amended paragraph:

~~---The present invention described in claim 17, is~~ A non-limiting feature of the present invention includes a computer-readable medium embodying a program of instructions for execution by the computer to perform a correlation method including: a frequency adding step for receiving a reference signal R0(t) and adding thereto a predetermined plurality n of frequency components (F1-Fn) to output a resultant reference signal R1(t)-Rn(t); an adding step for receiving n reference signals R1(t)-Rn(t) and a single said reference signal R0(t) as a base and adding them together to output a corrected reference signal R(t); and a correlating step for taking a correlation between a measurement signal S(t) and said corrected reference signal R(t) to output a correlation output signal.---

Page 8, please replace the first full paragraph beginning with the phrase "The present invention described in claim 18 . . ." with the following amended paragraph:

~~---The present invention described in claim 18, is~~ A non-limiting feature of the present invention includes a computer-readable medium embodying a program of instructions for execution by the computer to perform a correlation method including a frequency adding step having a predetermined plurality n of multiplying step (EXOR), an adding step, a spreading step, and a correlating step, wherein the plurality n of multiplying step (EXOR) each receive a corresponding frequency component (F1-Fn) and a symbol data D0(t) as a base and multiply both of them to output a multiplied symbol data D1(t)-Dn(t), the adding step receives said symbol data D1(t)-Dn(t) from a respective multiplying step (EXOR) and said symbol data D0(t) as the base and performs an adding

process for them to output a resultant addition symbol data D(t), the spreading step receives a spread signal of said addition symbol data D(t) and superposes thereon a spread code L(t) to output a corrected reference signal R(t), and the correlating step receives said corrected reference signal R(t) and a measurement signal S(t) and takes a correlation between them to output a correlation output signal.---

Page 8, please replace the second paragraph beginning with the phrase "The present invention described in claim 19 . . ." with the following amended paragraph:

~~The present invention described in claim 19, is~~ A non-limiting feature of the present invention includes an apparatus for calculation of a correlation value corresponding to a frequency error, including: a 0-th degree correlation device that takes, to output, a correlation between a reference signal and a measurement signal; an n-th degree correlation device that includes a frequency addition calculator for calculating a frequency component addition signal having a frequency component added to the reference signal, and a correlation calculator for taking, to output, a correlation between the frequency component addition signal and the measurement signal; and an addition device that adds an output of the 0-th degree correlation device and an output of the n-th degree correlation device.---

Page 9, please replace the first full paragraph beginning with the phrase "The present invention described in claim 20 . . ." with the following amended paragraph:

---~~The present invention described in claim 20, is~~ A non-limiting feature of the present

invention includes a correlation system including: a frequency adding device that receives a reference signal R0(t) and adds thereto a predetermined plurality n of frequency components (F1-Fn) to output a resultant reference signal R1(t)-Rn(t); an adder that receives n reference signals R1(t)-Rn(t) and a single said reference signal R0(t) as a base and adds them together to output a corrected reference signal R(t); and a correlator that takes a correlation between a measurement signal S(t) and said corrected reference signal R(t) to output a correlation output signal.---

Page 9, please replace the second full paragraph beginning with the phrase "The present invention described in claim 21 . . ." with the following amended paragraph:

---~~The present invention described in claim 21, is~~ A non-limiting feature of the present invention includes a correlation system including a frequency adding device having a predetermined plurality n of multiplying device (EXOR), an adder, a spreader, and a correlator, wherein the plurality n of multiplying device (EXOR) each receive a corresponding frequency component (F1-Fn) and a symbol data D0(t) as a base and multiply both of them to output a multiplied symbol data D1(t)-Dn(t), the adder receives said symbol data D1(t)-Dn(t) from a respective multiplying device (EXOR) and said symbol data D0(t) as the base and performs an adding process for them to output a resultant addition symbol data D(t), the spreader receives a spread signal of said addition symbol data D(t) and superposes thereon a spread code L(t) to output a corrected reference signal R(t), and the correlator receives said corrected reference signal R(t) and a measurement signal S(t) and takes a correlation between them to output a correlation output signal.---